UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,811	07/10/2001	Adam W. Smith	MS1-862US	6286

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EXAMINER
LAO, SUE X

ART UNIT	PAPER NUMBER
2126	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/902,811	SMITH ET AL.
	Examiner	Art Unit
	S. Lao	2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 2, 4-14, 16-29* is/are rejected.

7)☒ Claim(s) *3 and 15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/8/03, 1/16/04, 2/2?/04.*

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2.   Claims 1-29 are presented for examination.

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4.   Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites "the set of base types" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6.   Claims 1, 16, 18, 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Saulpaugh et al (U S Pat. 6,298,354).

As to claim 1, Saulpaugh teaches a software architecture for a distributed computing system (fig. 2) comprising:

an application (server) configured to handle requests (database transformation functionality, col. 9, lines 38-53) submitted by applications (client, applications 236) executing on remote devices (hardware 210a 210b with corresponding OS, col. 8, lines 45-65) over a network; and

an application program interface (Java APIs) to present functions used by the applications to access network and computing resources (basic language, utilities, I/O, network, GUI, applet services) of the distributed computing system, wherein the application program interface comprises a set of base classes (base classes 224) and types (types of services - language, utilities, I/O, network, GUI, applet) that are used in substantially all applications (standard interface regardless) executing on the remote devices submitting requests (col. 8, line 66 – col. 9, line 20). See additionally col. 10, lines 1-18, 39-65.

As to claim 16, Saulpaugh teaches a distributed computer software architecture, comprising:

one or more applications (applications 236) configured to be executed on one or more computing devices (hardware 210a 210b with corresponding OS, col. 8, lines 45-65), the applications handling requests submitted from remote computing devices (database transformation, col. 9, lines 38-53);

a networking platform (Java platform, Java virtual machine) to support the one or more applications (col. 7, line 54 – col. 8, line 15); and

an application programming interface (APIs) to interface the one or more applications with the networking platform (fig. 2, 3), wherein the application program interface comprises a set of types (types of services - language, utilities, I/O, network, GUI and applet services) that are used in each of the one or more applications (standard interface represented by base classes 224) (col. 8, line 66 – col. 9, line 20; col. 10, lines 1-18, 39-65; fig. 2).

As to claim 18, it is a method claim of claim 1, thus note claim 1, with respect to API, for discussion. Saulpaugh further teaches performing functions requested [inherent to the operation of Saulpaugh].

As to claim 24, it is a method claim of claim 1, thus note claim 1, with respect to API, for discussion. Saulpaugh further teaches receiving response [inherent to typical I/O services].

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 5-8, 10, 21-23, 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saulpaugh et al.

As to claims 5, 6, Saulpaugh teaches implementing APIs with namespaces (col. 9, lines 15-18). Saulpaugh further teaches a collections namespace that includes a plurality of classes and interfaces for in-memory data storage and manipulation (Java system database JSD, col. 10, lines 1-19,339-54), and part of: a first set of types including commonly used collection classes (base classes); a second set of types including interfaces to define a formal contract between developers creating new collections and developers consuming collections; and a third set of types that support creating strongly typed collections. [It is noted that the claim language only requires at least part of the three sets.]. Therefore, it would have been obvious to implement memory management services with corresponding namespace.

As to claim 7, including globalization/internationalization properties and services into a system's namespace/registry is well known. A typical example is the internationalization and localization services in OSF/Motif. Therefore, it

would have been obvious to include globalization/internationalization services into the service API / namespace of Saulpaugh. When Saulpaugh is modified as such, classes that define culture-related information, first set of types representing information about a user's culture and second set of types representing information about a user's region would have been obvious implementations.

As to claims 8, 10, Saulpaugh teaches a net namespace that includes a plurality of Classes that enables use of network resources without details of one or more protocols used to access the network resources (network APIs, col. 9, lines 15-18), service process namespace that include a plurality of classes that allow installation and running of services (applet APIs, col. 9, lines 15-18). The latter is also met by the well-known configuration services listed in Windows 95/NT registry.

As to claims 21-23, 27-29, these are the method claims of claims 5, 7 and 8, and thus note claims 5, 7 and 8, respectively, for discussions.

9.   Claims 2, 14, 17, 19, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saulpaugh et al as applied to claims 1, 16, 18, 24 and in view of Brandle et al (U S Pat. 5,218,699).

As to claims 2, 17, 19, 25, Saulpaugh teaches communication services (networking and I/O APIs, col. 9, lines 4-5), but does not teach this includes AsyncCallback delegate and IAsyncResult interface.

Brandle teaches communication services (asynchronous RPC), including an AsyncCallback delegate (remote router response procedure 114) supplied to an application (application 100), wherein the AsyncCallback delegate references a callback method to be called (connect to remote router response procedure, step 234) when a corresponding asynchronous operation (asynchronous RPC) is completed (results sent back by remote router application); and an IAsyncResult interface (queue 116) that enables determination of the status of an

asynchronous operation (result, [which represents the finished operation]). See col. 9, line 31 – col. 10, line 17.

Therefore, it would have been obvious to include the AsyncCallback delegate and IAsyncResult interface into the communication services of Saulpaugh. One of ordinary skill in the art would have been motivated to combine the teachings of Saulpaugh and Brandle because this would have allowed the communications be performed in different calling conventions (Brandle, col. 2, lines 30-34; col. 11, lines 53-62) while maintaining a standard interface, which would have further extended the goal of Saulpaugh of standard interfaces.

As to claim 14, note discussion of claims 2 and 1. In other words, Brandle teaches the communication services of AsyncCallback delegate and IAsyncResult interface, and Saulpaugh teaches implementing communication services with APIs.

10.   Claims 4, 20, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saulpaugh et al as applied to claims 1, 18 and 24 in view of Brechtel et al (U S Pat. 5,748,962).

As to claims 4, 20, 26, Saulpaugh teaches utility services (col. 9, lines 4-5), but does not teach that such services include event services represented by one or more classes that hold event data; and one or more delegates that identify a method to provide a response to an event.

Brechtel teaches utility services including event services (fig. 2). Brechtel teaches an event model including one or more classes that hold event data (CmnApi including data()), and one or more delegates (CmnEvent class, CmnProcess class) that identify a method to provide a response to an event (method send()). See col. 4, line 14 – col. 5, line 6.

Therefore, it would have been obvious to include the event model, one or more classes holding event data and one or more delegates as taught by Brechtel into the utility services of Saulpaugh. One of ordinary skill in the art would have been motivated to combine the teachings of Saulpaugh and

Brechtel because this would have allowed interprogram communications in Saulpaugh be conducted in a transparent manner regardless of the actual protocol (Brechtel, col. 1, lines 20-25).

11.   Claims 9, 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saulpaugh et al as applied to claim 1 in view of Java 2 ("Java 2 Platform, Standard Edition, v1.2.2 API Specification").

As to claim 9, Java 2 teaches the application program interface comprises a security namespace that includes a plurality of classes and interfaces that make available an underlying structure of a security system including one or more cryptographic services, code access security and role based security infrastructure (java.security, java.security.interfaces packages, page 2). Note discussion of claim 5 for implementing APIs with namespaces.

As to claim 11, Java 2 teaches the application program interface comprises a serialization namespace that includes a plurality of classes that enable serializing and deserializing of instance data (java.io package, page 2). Note discussion of claim 5 for implementing APIs with namespaces.

As to claim 12, Java 2 teaches the application program interface comprises a diagnostics namespace that includes a plurality of classes that enable debugging of applications, trace code execution reading event logs, writing event logs, and monitoring system performance (java.awt.event to service event fired page 1). It is noted that diagnostic/debug/monitoring events are typical system/application events, therefore, it would have been obvious to include such events into the APIs/namespace related to event processing. Note discussion of claim 5 for implementing APIs with namespaces.

As to claim 13, Java 2 teaches the application program interface comprises a messaging namespace that includes a plurality of classes that enable connecting to message queues on the network, sending messages to message queues, receiving messages from message queues, and peeking at

messages from message queues (java.awt.datatransfer package, page 1). Note discussion of claim 5 for implementing APIs with namespaces.

12. Claims 3, 15 are objected to as being dependent upon a respective rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the respective base claim and any intervening claims.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue Lao whose telephone number is (703) 305-9657. A voice mail service is also available at this number. The examiner's supervisor, SPE Meng-Ai An, can be reached on (703) 305 9678. The examiner can normally be reached on Monday - Friday, from 9AM to 5PM. The fax phone number for the organization where this application or proceeding is assigned is (703) 872 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

September 29, 2004

SUE LAO
PRIMARY EXAMINER